

## IN THE CLAIMS

Please cancel Claims 1 - 8.

Please add the following new claims:

--9. (New) A computerized method for implementing disk space quotas comprising the steps of:

maintaining a database of disk space quotas and disk space utilization data;

intercepting an I/O request before it reaches a file system driver;

determining whether any disk space quota would be exceeded by completion of the I/O request;

blocking completion of the I/O request if any disk space quota would be exceeded by completion of the I/O request; and

allowing the I/O request to complete and updating the disk space utilization data to reflect completion if a disk space quota would not be exceeded.

10. (New) The method of Claim 9, further comprising the step of issuing an error message if a disk space quota would be exceeded by completion of the I/O request.

11. (New) The method of Claim 9, further comprising the step of serializing I/O requests.

12. (New) The method of Claim 11, wherein the step of serializing I/O requests includes the step of locking a synchronizing object for the file when an I/O request for that file is detected.

13. (New) The method of Claim 12, wherein the synchronizing object is a kernel event.

14. (New) The method of Claim 9, wherein the disk space quotas comprise at least one ownership quota and at least one directory quota, the ownership quota being a maximum

quantity of disk space in use by files associated with a particular owner, the directory quota being a maximum quantity of disk space in use by files associated with a particular directory.

15. (New) The method of Claim 9, further comprising the step of serializing access to the database.

16. (New) The method of Claim 15, wherein the serializing step is performed using a simple kernel mutex.

17. (New) The method of Claim 9, wherein paging I/O requests are ignored.

18. (New) A computerized method for implementing disk space quotas comprising the steps of:

maintaining a database of disk space quotas;

intercepting an I/O request before it reaches a file system driver;

determining whether any disk space quota would be exceeded by the completion of the I/O request; and

allowing the I/O request to complete only if a disk space quota would not be exceeded.

19. (New) The method of Claim 18, further comprising the step of issuing an error message if a disk space quota would be exceeded by completion of the I/O request.

20. (New) The method of Claim 18, further comprising the step of serializing I/O requests.

21. (New) The method of Claim 20, wherein the step of serializing I/O requests includes the step of locking a synchronizing object for the file when an I/O request for that file is detected.

22. (New) The method of Claim 21, wherein the synchronizing object is a kernel event.

23. (New) The method of Claim 18, further comprising the step of:  
maintaining disk space utilization data; and  
updating the disk space utilization data to reflect completion of the I/O request.--